

AMENDMENT TO THE CLAIMS:

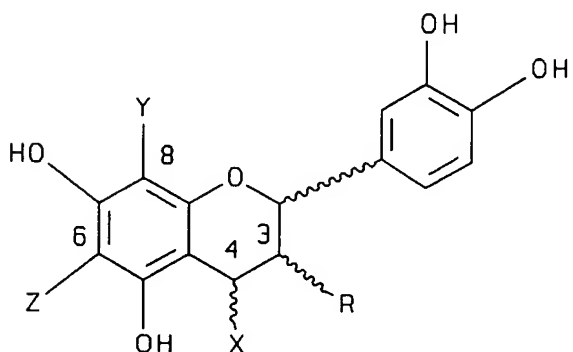
Claims 1-30 (Canceled)

Claim 31 (New) A non-chocolate food product comprising (i) a cocoa polyphenol and (ii) L-arginine in a combined amount effective to induce a physiological increase in nitric oxide upon ingestion by a human or a veterinary animal,

wherein the increase in nitric oxide has a therapeutic or prophylactic effect when the product is administered for an effective period of time, and

with the proviso that when the cocoa polyphenol is in the form of a cocoa ingredient, the amount of L-arginine is greater than that provided with the cocoa ingredient.

Claim 32 (New) A non-chocolate food product comprising (i) a polyphenol compound of formula A_n, wherein n is 1 or 2 to 18 and A has the following formula:



R is 3-(α) - OH, 3-(β), 3-(α)- O-saccharide, 3-(β)-O-saccharide, 3-(α)-O-C(O)-R', or 3-(β)-OC (O)-R';

bonding between adjacent monomers takes place at positions 4, 6 or 8;

a bond to a monomer in position 4 has alpha or beta stereochemistry;

X, Y and Z are selected from the group consisting of A, hydrogen, and a saccharide moiety, with the proviso that as to at least one terminal monomer, bonding of the adjacent monomer thereto is at position 4 and optionally Y = Z = hydrogen; and

wherein the saccharide moiety is a mono- or di-saccharide moiety and may be optionally substituted with a phenolic moiety and R' may be an aryl or heteroaryl moiety optionally substituted with at least one hydroxyl group; and
salts, derivatives and oxidation products thereof;

and (ii) L-arginine in a combined amount effective to induce a physiological increase in nitric oxide upon ingestion by a human or a veterinary animal,

wherein the increase in nitric oxide has a therapeutic or prophylactic effect when the product is administered for an effective period of time, and

with the proviso that when the polyphenol compound is in the form of a cocoa ingredient, the amount of L-arginine is greater than that provided with the cocoa ingredient.

Claim 33 (New) The non-chocolate food product of claim 31, wherein the cocoa polyphenol is in the form of a cocoa extract.

Claim 34 (New) The non-chocolate food product of claim 32, wherein the cocoa polyphenol is in the form of a cocoa extract.

Claim 35 (New) The non-chocolate food product of claim 31, wherein the cocoa polyphenol is in the amount of at least 1 mg/g.

Claim 36 (New) The non-chocolate food product of claim 31, wherein the cocoa polyphenol is in the amount of at least 1.25 mg/g.

Claim 37 (New) The non-chocolate food product of claim 31, wherein the cocoa polyphenol is in the amount of at least 1.5 mg/g.

Claim 38 (New) The non-chocolate food product of claim 31, wherein the cocoa polyphenol is in the amount of at least 2 mg/g.

Claim 39 (New) The non-chocolate food product of claim 31, wherein the cocoa polyphenol is in the amount of at least 5 mg/g.

Claims 40 (New) The non-chocolate food product of claim 31, wherein the L-arginine is the amount of at least 10 mg/g.

Claims 41 (New) The non-chocolate food product of claim 32, wherein the L-arginine is the amount of at least 10 mg/g.

Claim 42 (New) The non-chocolate food product of claim 31, wherein the cocoa polyphenol is in the form of a cocoa ingredient.

Claim 43 (New) The non-chocolate food product of claim 32, wherein the polyphenol compound is in the form of a cocoa ingredient.

Claim 44 (New) The non-chocolate food product of claim 31, which is a peanut-based food product.

Claim 45 (New) The non-chocolate food product of claim 44, wherein the peanut-based food product is peanut butter.

Claim 46 (New) The non-chocolate food product of claim 44, wherein the peanut-based food product is peanut brittle.

Claim 47 (New) The non-chocolate food product of claim 32, which is a peanut-based food product.

Claim 48 (New) The non-chocolate food product of claim 47, wherein the peanut-based food product is peanut butter.

Claim 49 (New) The non-chocolate food product of claim 47, wherein the peanut-based food product is peanut brittle.

Claim 50 (New) The non-chocolate food product of claim 31, wherein the L-arginine is in the form of an L-arginine-containing ingredient selected from the group consisting of peanuts, walnuts, hazelnuts, almonds, and soy beans.

Claim 51 (New) The non-chocolate food product of claim 32, wherein the L-arginine is in the form of an L-arginine-containing ingredient selected from the group consisting of peanuts, walnuts, hazelnuts, almonds, and soy beans.

Claims 52 (New) The non-chocolate food product of claim 31, wherein the food product is a pet food.

Claim 53 (New) The non-chocolate food product of claim 52, wherein the cocoa polyphenol is in the form of cocoa extract.

Claim 54 (New) The non-chocolate food product of claim 52, wherein the cocoa polyphenol is in the amount of at least 1 mg/g.

Claim 55 (New) The non-chocolate food product of claim 52, wherein the cocoa polyphenol is in the amount of at least 1.25 mg/g.

Claim 56 (New) The non-chocolate food product of claim 52, wherein the cocoa polyphenol is in the amount of at least 1.5 mg/g.

Claim 57 (New) The non-chocolate food product of claim 52, wherein the cocoa polyphenol is in the amount of at least 2 mg/g.

Claim 58 (New) The non-chocolate food product of claim 52, wherein the cocoa polyphenol is in the amount of at least 5 mg/g.

Claim 59 (New) The non-chocolate food product of claim 52, wherein the amount of L-arginine is at least 10 mg/g.

Claims 60 (New) The non-chocolate food product of claim 32, wherein the food product is a pet food.

Claim 61 (New) The non-chocolate food product of claim 60, wherein the polyphenol compound is in the amount of at least 1 mg/g.

Claim 62 (New) The non-chocolate food product of claim 60, wherein the polyphenol compound is in the amount of at least 1.25 mg/g.

Claim 63 (New) The non-chocolate food product of claim 60, wherein the polyphenol compound is in the amount of at least 1.5 mg/g.

Claim 64 (New) The non-chocolate food product of claim 60, wherein the polyphenol compound is in the amount of at least 2 mg/g.

Claim 65 (New) The non-chocolate food product of claim 60, wherein the polyphenol compound is in the amount of at least 5 mg/g.

Claim 66 (New) The non-chocolate food product of claim 60, wherein the amount of L-arginine is at least 10 mg/g.

Claim 67 (New) A non-chocolate food product comprising a cocoa polyphenol in the amount of at least 1 mg/g and L-arginine in the amount of at least 10 mg/g.

Claim 68 (New) The non-chocolate food product of claim 67, wherein the cocoa polyphenol is in the amount of at least 1.25 mg/g.

Claim 69 (New) The non-chocolate food product of claim 67, wherein the cocoa polyphenol is in the amount of at least 1.5 mg/g.

Claim 70 (New) The non-chocolate food product of claim 67, wherein the cocoa polyphenol is in the amount of at least 2 mg/g.

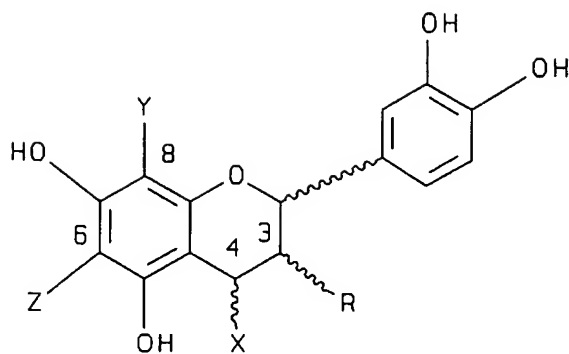
Claim 71 (New) The non-chocolate food product of claim 67, wherein the cocoa polyphenol is in the amount of at least 3 mg/g.

Claim 72 (New) The non-chocolate food product of claim 67, wherein the cocoa polyphenol is in the amount of at least 4 mg/g.

Claim 73 (New) The non-chocolate food product of claim 67, wherein the cocoa polyphenol is in the amount of at least 5 mg/g.

Claim 74 (New) The non-chocolate food product of claim 67, wherein L-arginine is in the amount of at least 100 mg/g.

Claim 75 (New) A method of treating or preventing an NO-responsive disease or disorder by administering to a subject in need thereof an effective amount of a composition comprising (i) a polyphenol compound of formula A_n , wherein n is 1 or 2 to 18 and A has the following formula:



R is 3-(α) - OH, 3-(β), 3-(α)- O-saccharide, 3-(β)-O-saccharide, 3-(α)-O-C(O)-R', or 3-(β)-OC (O)-R';

bonding between adjacent monomers takes place at positions 4, 6 or 8;

a bond to a monomer in position 4 has alpha or beta stereochemistry;

X, Y and Z are selected from the group consisting of A, hydrogen, and a saccharide moiety, with the proviso that as to at least one terminal monomer, bonding of the adjacent monomer thereto is at position 4 and optionally Y = Z = hydrogen; and

wherein the saccharide moiety is a mono- or di-saccharide moiety and may be optionally substituted with a phenolic moiety and R' may be an aryl or heteroaryl moiety optionally substituted with at least one hydroxyl group; and

salts, derivatives and oxidation products thereof;

and (ii) L-arginine in a combined amount effective to modulate nitric oxide and/or NO synthase upon ingestion by a human or a veterinary animal,

with the proviso that when the compound is in the form of a cocoa ingredient, the amount of L-arginine is greater than that provided with a cocoa ingredient.

Claim 76 (New) The method of claim 75, wherein the NO-responsive disease and/or disorder is selected from the group consisting of: hypertension, cardiovascular disease, renal disease, and impaired cognitive function.

Claim 77 (New) The method of claim 76, wherein the composition is a food.

Claim 78 (New) The method of claim 76, wherein the composition is a
pharmaceutical.